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EXAMINER

NGUYEN, DUSTIN

ART UNIT PAPER NUMBER

2154

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14

Please find below and/or attached an Office communication concerning this application or proceeding.

7

## Office Action Summary

Application No.

09/261,621

Applicant(s)

VAHALIA ET AL.

Examiner

Dustin Nguyen

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1 – 50 are presented for examination.

#### ***Response to Arguments***

2. Applicant's arguments filed 10/21/2003 have been fully considered but they are not persuasive.

3. As per remarks, Applicants' argued that (1) Teare does not specify data storage locations in the file for storing data of the file. Applicants mentioned the file server providing a user with "pointers to where the data to be accessed is stored in the file server" ..

4. As to point (1), in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pointers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

5. As per remarks, Applicants' argued that (2) that the cited reference fail to provide a proper motivation for combining St. John Herbert, Schmuck and Teare.

Art Unit: 2154

6. As to point (2), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to a person skill in the art to combine the references because the adding of Schmuck's locking mechanism would allow to keep data consistency.

7. As per remarks, Applicants' argued that (3) neither St. John Herbert, Schmuck, nor Teare disclose that information specifying data storage locations in the file server for storing data of the file should be returned by the file server to a data processing device in the data network in response to a request from the data processing device to the file server for metadata about the file.

8. As to point (3), Teare discloses storing data of the file should be returned by the file server to a data processing device in the data network in response to a request from the data processing device to the file server [ col 2, lines 17-24 ] for metadata about the file [ col 5, lines 17-27 ].

Art Unit: 2154

9. As per remarks, Applicants' argued that hindsight reconstruction is improper because it fails to consider the subject matter of the invention "as a whole" and fails to consider the invention as of the date at which the invention was made.

10. As to point (4), in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

11. As per remarks, Applicants' argued that (5) nothing in St. John Herbert to suggest that the user or client in St. John Herbert knows or cares about the data storage locations in the database server, so that the user or client would not be able to modify any metadata from the file server.

12. As to point (5), in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the user or client knows or cares about the data storage locations in the database server) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification,

Art Unit: 2154

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

13. As per remarks, Applicants' disagreed (6) on the motivation of the obviousness combination of St. John Herbert and Schmuck [ page 15, lines 19-23 ].

14. As to point (6), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to combine the teaching of St. John Herbert and Schmuck because Schmuck discloses the reading of most recent metadata from the disk [ col 43, lines 56-58 ].

15. As per remarks, Applicants' argued that (7) there is no differentiation of the computer nodes and disks in the multiprocessor system of Schmuck into a file server and a client in a data network.

16. As to point (7), it would have been obvious to a person skill in the art to see that Schmuck's computer 1, 2 and 3 access files from disks device as client/server architecture.

17. As per remarks, Applicants' argued that (8) St. John Herbert fails to suggest dynamically linking application programs of the client with input-output related operating system routines of the client.

18. As to point (8), St. John Herbert discloses the above limitation [ 22, 26, Figure 4; and col 13, lines 20-col 14, lines 2 ].

19. As per remarks, Applicants' argued that (9) St. John Herbert fails to suggest that input-output related operating system routines of the client should obtain from the file server locks on at least a portion of each of the files, obtain metadata for producing data access commands for accessing data storage in the file server, produce the data access commands from the metadata, and send the data access commands to the file server in order to access the data storage of the file server.

20. As to point (9), the previous Office Action states that these limitations are disclosed by Schmuck and Teare as mentioned in the rejection of claims 1 and 8.

21. As per remarks, Applicants' argued that (10) the updated metadata in Galeazzi is not metadata that has been modified in accordance with any data storage locations to which any data has been written.

Art Unit: 2154

22. As to point (10), it would have been obvious to a person skill in the art that metadata of related data needs to be updated because it would allow information to maintain its integrity.

23. As per remarks, Applicants disagreed on (11) the combination of Galeazzi with St. John Herbert, Schmuck, and Teare.

24. As to point (11), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Galeazzi discloses the steps of accepting a command, parsing the command, and modifying the database management system [ Abstract ].

25. As per remarks, Applicants' argued that (12) Galeazzi does not suggest asynchronous write operation, or more specifically, asynchronous write operation to data storage locations in the database, followed by a commit of metadata that has been modified in accordance with a write operation upon the database.

26. As to point (12), it is rejected as mentioned in the previous Office Action. Furthermore, Galeazzi discloses the asynchronous write operation [ col 4, lines 45-col 5, lines 5 ].



27. As per remarks, Applicants' argued that (13) it is not seen how the metadata node of the multi-processor system of Schmuck can be considered a client in a data processing network including a client and a file server.

28. As to point (13), Schmuck discloses a computer network with multiple computers [ Abstract ] and the multiple computers access to the share network disks [ col 3, lines 26-39 ].

29. As per remarks, Applicants' argued that (14) there is nothing in Goldberg suggesting that the data object layer is a data mover computer of a file server or even any kind of layer that would perform a file server function such as mapping logical addresses in a file to data storage locations.

30. As to point (14), Goldberg discloses the mapping logical addresses in a file to data storage locations [ i.e. connecting and accessing the database ] [ col 5, lines 57-col 6, lines 5 ]. Furthermore, Applicants' specification discloses data mover computer includes a number of software modules [ page 38, lines 13-page 39, lines 5 ], Goldberg's data object layer is also software module [ col 4, lines 1-19 ].

31. As per remarks, Applicants' argued that (15) Goldberg fails to disclose a client that sends the data access command to a data storage device over a data transmission path that bypasses a data mover computer.

32. As to point (15), Goldberg discloses bypassing the data object layers [ col 2, lines 17-24 ].

33. As per remarks, Applicants disagreed (16) on the combination of Goldberg, St. John Herbert, Schmuck, and Teare.

34. As to point (16), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion step of bypassing the data mover of Goldberg would provide an improved database interfacing for better system performance.

### ***Claim Rejections - 35 USC § 103***

35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

36. Claims 1-4, 6-8, 11-15, 23, 25-27, 30-35, 36-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. John Herbert, III [ US Patent No 6,366,917 ], in view of Schmuck et al. [ US Patent No 5,940,841 ], and further in view of Teare et al. [ US Patent No 6,151,624 ].

37. As per claim 1, St. John Herbert discloses the invention substantially as claimed including a method of operating a file server in a data network, said method comprising:

the file server receiving a request for metadata about a file to be accessed [ col 3, lines 9-20 and lines 34-38 ], the request being received from a data processing device in the data network [ 22, 24, 26, Figure 1B ].

St. John Herbert does not specifically disclose

in response to the request for metadata, the file server granting to the data processing device a lock on at least a portion of the file, and returning to the data processing device metadata of the file including information specifying data storage location in the file server for storing data of the file.

Schmuck discloses

in response to the request for metadata [ col 2, lines 57-59 ], the file server granting to the data processing device a lock on at least a portion of the file [ col 34, lines 64-col 35, lines 9 ].

Teare discloses

returning to the data processing device metadata of the file including information specifying data storage location in the file server for storing data of the file [ col 2, lines 4-10; and col 4, lines 54-57 ].

It would have been obvious to a person skill in the art at the time the invention was made to combine St. John Herbert, Schmuck and Teare because Schmuck's locking mechanism would provide efficient basic file control in a shared disk environment for multiple computers [ Schmuck, col 3, lines 50-57 ].

38. As per claim 2, St. John Herbert does not specifically disclose the data storage locations, and a data mover computer for managing locks on files having data stored in said data storage device, wherein the data storage device stores metadata of a plurality of files having file data stored in the data storage device, the data mover computer is coupled to the data storage device for transfer of the metadata between the data storage device and the data mover computer, the data mover computer has a random access memory, and the method includes the data mover computer maintaining a metadata cache in the random access memory, and the method includes the data mover computer accessing the metadata cache for obtaining the metadata that is returned to the data processing device. Schmuck discloses the data storage locations [ Figure 1 ], and a data mover computer for managing locks on files having data stored in said data storage device [ Figure 1; and Abstract ], wherein the data storage device stores metadata of a plurality of files having file data stored in the data storage device, the data mover computer is coupled to the data storage device for transfer of the metadata between the data storage device and the data mover computer, the data mover computer has a random access memory [ Abstract ], and the method includes the data mover computer maintaining a metadata cache in the random access memory, and the method includes the data mover computer accessing the metadata cache for obtaining the metadata that is returned to the data processing device [ col 31, lines 64-col 32, lines 8 ]. It

would have been obvious to a person skill in the art at the time the invention was made to combine John Herbert and Schmuck because Schmuck's teaching of data mover would provide a caching method that allows to speed up the process of accessing data.

39. As per claim 3, St. John Herbert does not specifically disclose a plurality of data processing devices in the data network share read-write access to the file, and the file server grants respective read locks and write locks to the data processing devices in the data network. Schmuck discloses a plurality of data processing devices in the data network share read-write access to the file [ col 1, lines 50-65 ], and the file server grants respective read locks and write locks to the data processing devices in the data network [ col 32, lines 15-25 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of St. John Herbert, and Schmuck because Schmuck's granting read and write lock would provide the ability to allocate storage from the same pool of disks in parallel while maintaining full consistency of the metadata.

40. As per claim 4, St. John Herbert discloses the data processing device writes data to the data storage locations in the file server, modifies the metadata from the file server in accordance with the data storage locations in the file server to which the data is written [ Abstract ], and sends the modified metadata to the file server [ 154, 156, Figure 20 ].

41. As per claim 6, St. John Herbert does not disclose the data processing device has a cache memory for caching the metadata of the file including a version identifier associated with the

metadata of the file, and wherein the data processing device includes the version identifier in the request for access to the file, the file server compares the version identifier from the data processing device to a version identifier of a most recent version of the metadata of the file, and the file server returns the most recent version of the metadata of the file to the data processing device when the comparison of the version identifier from the data processing device to the version identifier of the most recent version of the metadata of the file indicates that the metadata of the file cached in the cache memory of the data processing device is not the most recent metadata of the file. Schmuck discloses the data processing device has a cache memory for caching the metadata of the file including a version identifier associated with the metadata of the file, and wherein the data processing device includes the version identifier in the request for access to the file, the file server compares the version identifier from the data processing device to a version identifier of a most recent version of the metadata of the file, and the file server returns the most recent version of the metadata of the file to the data processing device when the comparison of the version identifier from the data processing device to the version identifier of the most recent version of the metadata of the file indicates that the metadata of the file cached in the cache memory of the data processing device is not the most recent metadata of the file [ col 43, lines 54-64 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of St. John Herbert and Schmuck because Schmuck's teaching of versioning would provide an additional step for keep track of data integrity.

42. As per claim 7, St. John Herbert discloses the version identifier is a number that is incremented when the metadata of the file is modified [ col 9, lines 36-46 ].

43. As per claim 8, it is rejected for similar reasons as stated above in claim 1. Furthermore, Teare discloses

the client receiving from the file server the metadata of the file, using the metadata of the file to produce at least one data access command for accessing the data storage locations in the file server, and sending the data access command to the file server to access the data storage locations in the file server [ col 25, lines 47-59 ]; and

the file server responding to the data access command by accessing the data storage locations in the file server [ col 2, lines 11-16 ].

44. As per claim 11, it is rejected for similar reasons as stated above in claim 3.

45. As per claim 12, St. John Herbert does not specifically disclose the lock on at least a portion of the file granted by the file server to the client is not granted to any particular application process of the client, and wherein the client has a lock manager that grants a local file lock to a particular application process that accesses the file. Schmuck discloses the lock on at least a portion of the file granted by the file server to the client is not granted to any particular application process of the client, and wherein the client has a lock manager that grants a local file lock to a particular application process that accesses the file [ col 32, lines 15-25 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of St. John Herbert and Schmuck because Schmuck's teaching of locking file would allow data to maintain its integrity inside the communication network.

46. As per claim 13, St. John Herbert does not specifically disclose the client has a lock manager that responds to a request from an application process of the client for access to the file by granting to the application process a local file lock on at least a portion of the file; and then sending to the file server said at least one request for access to the file. Schmuck discloses the client has a lock manager that responds to a request from an application process of the client for access to the file by granting to the application process a local file lock on at least a portion of the file; and then sending to the file server said at least one request for access to the file [ col 33, lines 39-45 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of St. John Herbert and Schmuck because Schmuck's teaching of lock manager would allow to maintain the data consistency inside St. John Herbert's system.

47. As per claim 14, it is rejected for similar reasons as stated above in claim 8. Furthermore, St. John Herbert discloses dynamically linking application programs of the client with input-output related operating system routines of the client [ col 3, lines 20-25 ].

48. As per claim 15, it is rejected for similar reason as stated above in claim 4.

49. As per claims 19 and 20, they are rejected for similar reasons as stated above in claims 6 and 7.



Art Unit: 2154

50. As per claims 23, 25 and 26, they are rejected for similar reasons as stated above in claims 2, 6, and 7.

51. As per claim 27, it is apparatus claimed of claims 1 and 8, it is rejected for similar reasons as stated above in claims 1 and 8.

52. As per claim 30, it is apparatus claimed of claim 3, it is rejected for similar reason as stated above in claim 3.

53. As per claims 31-34, they are apparatus claimed of claims 12-15, they are rejected for similar reasons as stated above in claims 12-15.

54. As per claim 35, it is apparatus claimed of claim 6, it is rejected for similar reason as stated above in claim 6.

55. As per claim 36, it is program product claimed of claim 1, it is rejected for similar reason as stated above in claim 1. Furthermore, St. John Herbert discloses at least one network port for exchange of control information and metadata of files in the file system with at least one data processing device [ Figure 1B ].

56. As per claim 37, it is program product claimed of claim 4, it is rejected for similar reason as stated above in claim 4.

57. As per claims 38 and 39, they are rejected for similar reasons as stated above in claim 2.

58. As per claims 40 and 41, they are rejected for similar reasons as stated above in claims 6 and 7.

59. As per claim 42, it is rejected for similar reasons as stated above in claim 8.

60. As per claims 43-45, they are rejected for similar reasons as stated above in claims 13-15.

61. As per claim 49, it is rejected for similar reasons as stated above in claim 6.

62. Claims 5, 16-18, 22, 24, 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. John Herbert, III [ US Patent No 6,366,917 ], in view of Schmuck et al. [ US Patent No 5,940,841 ], and further in view of Teare et al. [ US Patent No 6,151,624 ] and Galeazzi et al. [ US Patent No 6,535,868 ].

63. As per claim 5, St. John Herbert, Schmuck, Teare do not specifically disclose the data processing device sends the modified metadata to the file server after the data processing device writes the data to the data storage of the file server. Galeazzi discloses the data processing device sends the modified metadata to the file server after the data processing device writes the data to the data storage of the file server [ col 5, lines 58-col 6, lines 15 ]. It would have been

obvious to a person skill in the art at the time the invention was made to combine the teaching of St. John Herbert, Schmuck, Teare and Galeazzi because Galeazzi's teaching would allow for data to be maintained for up to date information.

64. As per claim 16, they are rejected for similar reasons as stated above in claim 5.

65. As per claim 17, St. John Herbert, Schmuck and Teare do not disclose the client performs asynchronous write operations upon the data storage locations of the file server, and wherein the client sends the modified metadata to the file server in response to a commit request from an application process of the client. Galeazzi discloses the client performs asynchronous write operations upon the data storage locations of the file server, and wherein the client sends the modified metadata to the file server in response to a commit request from an application process of the client [ col 6, lines 24-41 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of St. John Herbert, Schmuck, Teare and Galeazzi because Galeazzi's teaching would provide a step for maintaining data integrity inside communication network.

66. As per claim 18, Schmuck discloses the client performs asynchronous write operations upon the data storage locations of the file server, and wherein the client sends the modified metadata to the file server when the client requests the file server to close the file [ col 43, lines 37-38 ].

67. As per claim 22, it is apparatus claimed of claim 5, it is rejected for similar reasons as stated above in claim 5. Furthermore, Schmuck discloses the data mover computer is programmed to receive modified metadata from said each data processing device [ col 5, lines 31-38 ].

68. As per claims 24, it is rejected for similar reasons as stated above in claims 2 and 5.

69. As per claims 46-48, they are rejected for similar reasons as stated above in claims 16-18.

70. Claims 9, 10, 21, 28, 29 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over St. John Herbert, III [ US Patent No 6,366,917 ], in view of Schmuck et al. [ US Patent No 5,940,841 ], and further in view of Teare et al. [ US Patent No 6,151,624 ] and Goldberg et al. [ US Patent No 6,076,092 ].

71. As per claim 9, it is rejected for similar reasons as stated above in claim 1. Furthermore, St. John Herbert, Schmuck, and Teare do not specifically disclose the client sends the data access command to the data storage device over a data transmission path that bypasses the data mover computer. Goldberg discloses the client sends the data access command to the data storage device over a data transmission path that bypasses the data mover computer [ col 10, lines 43-49 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of St. John Herbert, Schmuck, Teare and Goldberg because Goldberg's

teaching of transmission path that bypasses the data mover computer would reduce communication traffic and increase performance for the system.

72. As per claim 10, it is rejected for similar reasons as stated above in claim 2.

73. As per claims 21, it is apparatus claimed of claims 1 and 9, it is rejected for similar reasons as stated above in claims 1 and 9.

74. As per claims 28 and 29, they are rejected for similar reasons as stated above in claims 9 and 10.

75. As per claim 50, it is rejected for similar reasons as stated above in claims 1, 2, 8 and 9.

76. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2154

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (703) 305-5321. The examiner can normally be reached on Monday – Friday (8:00 – 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directly to the receptionist whose telephone number is (703) 305-3900.

Dustin Nguyen



JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100